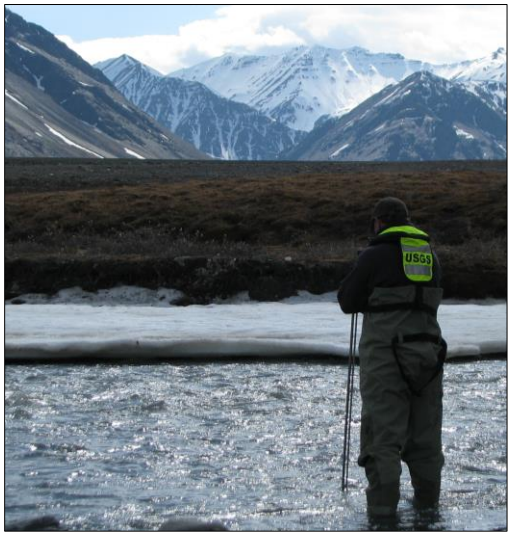
Being Smart with Water Resources

FY 2014 President's Proposed Budget
Total request is $222,869,000 (+$13,255,000 above FY 2012 enacted level)

The USGS is the largest supplier of hydrologic information in the world. As competition for water resources grows, so does the need for better information about water quantity and quality. The proposed budget increases would allow the USGS to meet the challenges of providing cutting-edge, up-to-date water information for the Nation and would facilitate partnering with other Federal, state, and local agencies to leverage USGS' 8,000-strong streamgage network for strategic decisionmaking.

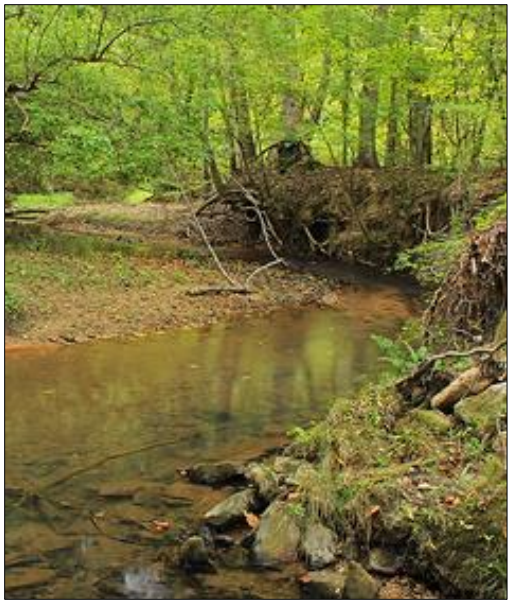
Increases for USGS science are within two categories, which are (1) support for DOI's WaterSMART initiative and (2) water resource data collection and research.

WaterSMART



WaterSMART is a multidisciplinary effort designed to further clarify the complex linkages among water quantity, water quality, and the environment, resulting in improved management of this vital but finite resource. WaterSMART is the USGS' contribution to the DOI's Water Challenges initiative and is operated in coordination with the Bureau of Reclamation. Through the combined efforts of Reclamation in the West and the USGS throughout the Nation, WaterSMART provides the foundation for a sustainable water strategy. Proposed increases for WaterSMART support water quality assessments, groundwater infrastructure, and effective modeling for decisionmakers.

<u>Water Quality Enhancements and Assessments</u>



With the proposed budget increases, the USGS National Water Quality Assessment Program would continue development of the first large-scale regional water-quality assessment in cooperation with EPA, focusing on stream quality in the agricultural Midwest. The USGS would also undertake research on understanding the relations between human-made and natural contaminants, their behavior and movement in the environment, and their effects on human and environmental health. The USGS would address the highest priority water-resource contamination issues facing the Nation, including contaminants of emerging concern.

<u>Groundwater</u>

The USGS would begin the necessary steps toward full implementation of the National Groundwater Monitoring Network, as authorized under the SECURE Water Act. The proposed network would bring monitoring data from the USGS together with data from States and other partners. An expansion of the groundwater climate response network would improve understanding of the effects of global climate change on groundwater availability. This initial funding would allow the USGS to move from the current pilot stage and begin implementation of the Network.

Putting Information in the Hands of Decisionmakers

With proposed WaterSMART funding, the USGS would begin development of a web-based system where data for daily streamflows, recharge, precipitation, changes in storage, and monthly water use are available for each of the Nation's watersheds. The system will allow managers to examine the overall water budget for any area, including how much water is coming into and leaving the area. Proposed funding for WaterSMART would also support the development of models and tools that managers can use to predict the effects that decisions about pesticides, nutrients, sediment, or salinity will have on downstream water resources and ecosystems. Additionally, the USGS is working to develop, test, and implement methods to estimate flows at locations that now lack streamgages.

Water Resources

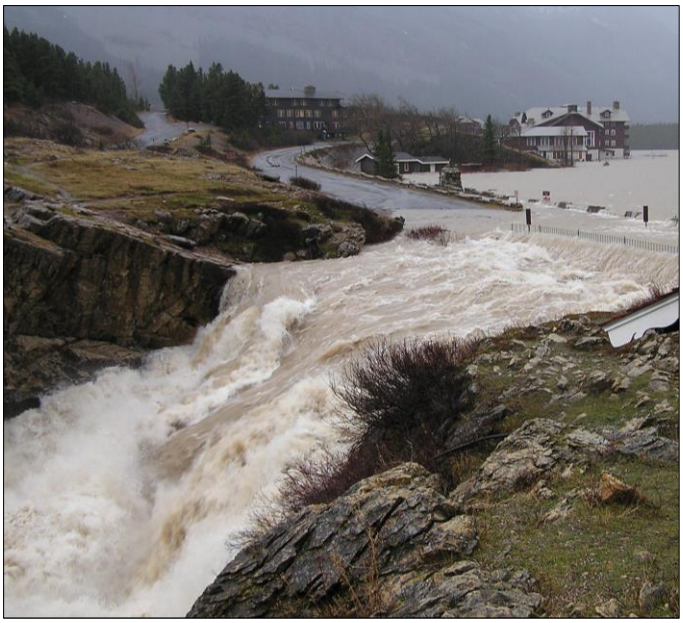
The USGS collects information needed to understand the Nation's water resources, and provides access to water data, publications, and maps, as well as to recent water projects and events. The 2014 Budget increases for water resources supports the USGS streamgage network and water management strategies.

Streamgages

The USGS has an extensive network of streamgages in all 50 states and territories. With the proposed funding increases, the USGS would be able to fully fund 100 additional streamgages, as well as partner with other agencies on 200 more streamgages. These streamgages are a vital part of the Nation's water infrastructure, provide critical data for the WaterSMART initiative, and play a crucial role in helping resource managers with floods and droughts. In addition, the USGS would also be able to invest in research and development on the next generation of streamgages. These streamgages would make use of the latest in remote sensing, bathymetry, and particle imagery to deliver streamflow information while achieving cost efficiencies.

Water Resource Management

As the record-breaking floods of 2011 and the record-breaking droughts of 2012 showed, water availability can change wildly from season to season. The proposed 2014 increase would provide for a Flood Coordinator and a Drought Coordinator, who would help plan and oversee the USGS response to ongoing floods and droughts and documentation for nationally consistent data acquisition and analyses that are essential for public safety and prosperity. In addition, under the proposed budget increases, the USGS would be able to provide reports and data to Federal, state, and local agencies, with particular emphasis on Tribal relations. The USGS would enhance its ability to address water availability issues, such as water rights, water use, hydrologic conditions, and water-quality issues. This would allow partner and Tribal river managers to develop effective strategies to maintain and restore critical habitats and healthy ecosystems.



To learn more, visit the USGS Office of Budget, Planning and Integration website: www.usgs.gov/budget